WEST Search History

DATE: Friday, November 14, 2003

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR		
L16	US-5595707-$.DID. OR US-5654199-$.DID. OR US-5654200-$.DID. OR US-5650327-$.DID.	8	L16
L15	L14 and borax	7	L15
L14	silver adj nitrate and methenamine	80	L14
L13	stain same silver adj nitrate and methenamine and borax	0	L13
L12	stain same silver adj nitrate and methanamine and borax	0	L12
L11	silver adj nitrate same (methanamine and borax)	0	L11
L10	stain same ((multiple or several or plurality or two) with reagent or multi-reagent or multireagent)	121	L10
L9	sequential with reagent same stain	6	L9
L8	L7 and reagent same sequentially with sample	1	L8
L7	L6 and stain same sample	80	L7
L6	stain and (unstable with stable)	415	L6
L5	L4 and stain	32	L5
L4	sequential with reagent same (slide or support or plate)	305	L4
L3	sequential with reagent	1563	L3
L2	unstable adj stain same sample	0	L2
L1	unstable adj stain same sample same (slide or support or plate)	0	L1

END OF SEARCH HISTORY

STN Search History

L1 20971 STAIN### (P) (MULTIPL##### OR PLURAL#### OR SEVERAL OR TWO) (S) (REAGENT OR SOLUTION OR INGREDIENT OR COMPONENT OR REACT###)

L2 2577 L1 AND (SLIDE OR GLASS OR SHEET OR SURFACE) (S) (BIOLOGICAL OR CELL OR TISSUE OR SAMPLE)

L5 305 L4 AND STAIN (S) (BIOLOGICAL OR CELL OR TISSUE OR SAMPLE)

L8 0 L1 AND (MULTI-COMPONENT OR MULTICOMPONENT OR MULTI-REAGENT OR MULTIREAGENT) (4N) STAIN

L9 1 L1 AND (MULTI-COMPONENT OR MULTICOMPONENT OR MULTI-REAGENT OR MULTIREAGENT) (S) STAIN

(FILE 'HOME' ENTERED AT 11:58:49 ON 14 NOV 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE' ENTERED AT 11:59:19 ON 14 NOV 2003

L1 20971 S STAIN### (P) (MULTIPL##### OR PLURAL#### OR SEVERAL OR TWO) (
L2 2577 S L1 AND (SLIDE OR GLASS OR SHEET OR SURFACE) (S) (BIOLOGICAL O
L3 332 S L2 AND STAIN (S) (SLIDE OR GLASS OR SHEET OR SURFACE)
L4 306 DUP REM L3 (26 DUPLICATES REMOVED)
L5 305 S L4 AND STAIN (S) (BIOLOGICAL OR CELL OR TISS
L6 251 S L5 NOT PY>1998
L7 3 S L6 AND AUTOMATED
L8 0 S L1 AND (MULTI-COMPONENT OR MULTICOMPONENT OR MULTI-REAGENT OR
L9 1 S L1 AND (MULTI-COMPONENT OR MULTICOMPONENT OR MULTI-REAGENT OR
L10 3 S L1 AND UNSTABLE (S) STAIN

L7 ANSWER 1 OF 3 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN
AN 97282155 EMBASE
DN 1997282155
TI A novel image cytometric method for quantitation of immunohistochemical staining of cytoplasmic antigens.
AU Guillaud M.; Matthews J.B.; Harrison A.; MacAulay C.; Skov K.
CS M. Guillaud, Cancer Imaging Department, BC Cancer Research Centre, 601 West 10th Ave., Vancouver, BC V5Z 1L3, Canada
SO Analytical Cellular Pathology, (1997) 14/2 (87-99).
Refs: 22
ISSN: 0921-8912 CODEN: ACPAER
CY Ireland
DT Journal; Article
FS 005 General Pathology and Pathological Anatomy
016 Cancer
LA English
SL English
AB Evaluation of molecular markers by immunohistochemical labelling of **tissue** sections has traditionally been performed by qualitative assessment by trained pathologists. For those markers with a **staining component** present outside of the nucleus, there has been no image histometric method available to reliably and consistently define **cell** interfaces within the **tissue**. We present a new method of approximating cellular boundaries to define cellular regions within which quantitative measurements of **staining** intensity may be made. The method is based upon Voronoi tessellation of a defined region of interest (ROI), and requires only the position of the nuclear centroids within the ROI. Here we describe the VORSTAIN software which has been developed based on the Ontometrics CytoSavant **Automated** Image Cytometry System. To demonstrate this technique, human breast cancer sections immunohistochemically **stained** for bcl-2 protein and counter-**stained** with nuclear methyl green **stain** were evaluated. Intra-observer variation in the measured values was between 1.5-2.6% and inter-observer variation was between 1.8-4.4%. The primary source of variability was due to difficulties in interpreting the exact position of the nuclear centroids. Analysis of mean **staining** densities for each **slide** correlated well with subjective scoring performed by **two** independent pathologists. Using VORSTAIN, significant variation of **staining** intensities between regions within the same **slide** was measured for some sections, indicating a large degree of heterogeneity within the turnouts. The ability to accurately quantitate the degree of heterogeneity of molecular marker expression within tumours may be a valuable tool in prognostication.

L7 ANSWER 2 OF 3 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN
AN 93157663 EMBASE
DN 1993157663
TI Microwave-accelerated cytochemical **stains** for the image analysis and the electron microscopic examination of light microscopy diagnostic **slides**.
AU Hanker J.; Giammara B.
CS Department of Biomedical Engineering, School of Medicine, University of North Carolina,Chapel Hill, NC 27599-7575, United States
SO Scanning, (1993) 15/2 (67-80).
ISSN: 0161-0457 CODEN: SCNNDF
CY United States
DT Journal; Article

FS 005 General Pathology and Pathological Anatomy
027 Biophysics, Bioengineering and Medical Instrumentation
LA English
SL English
AB Recent studies in our laboratories have shown how microwave (MW) irradiation can accelerate a number of **tissue**-processing techniques, especially **staining**, to aid in the preparation of single specimens on **glass** microscope **slides** or coverslips for examination by light microscopy (and electron microscopy, if required) for diagnostic purposes. Techniques have been developed, which give permanently **stained** preparations, that can be studied initially by light microscopy, their areas of interest mapped, and computer-**automated** image analysis performed to obtain quantitative information. This is readily performed after MW-accelerated **staining** with silver methenamine by the Giammara-Hanker PATS or PATS-TS **reaction**. This variation of the PAS **reaction** gives excellent markers for specific infectious agents such as lipopolysaccharides for gram-negative bacteria or mannans for fungi. It is also an excellent **stain** for glycogen and basement membranes and an excellent marker for type III collagen or reticulin in the endoneurium or perineurium of peripheral nerve or in the capillary walls. Our improved MW- accelerated Feulgen **reaction** with silver methenamine for nuclear DNA is useful to show the nuclei of bacteria and fungi as well as of **cells** they are infecting. Improved coating and penetration of **tissue surfaces** by thiocarbohydrazide bridging of ruthenium red, applied under MW-acceleration, render biologic specimens sufficiently conductive for SEM so that sputter coating with gold is unnecessary. The specimens treated with these highly visible electron-opaque **stains** can be screened with the light microscope after mounting in polyethylene glycol(PEG) and the structures or areas selected for EM study are mapped with a Micro-Locator(TM) **slide**. After removal of the water soluble PEG the specimens are remounted in the usual EM media for scanning electron microscopy (SEM) or transmission electron microscopy (TEM) study of the mapped areas. By comparing duplicate smears from areas of infection, such as **two** coverslips of buffy coat smears of blood from a patient with septicemia, the microorganisms responsible can occasionally be classified for antimicrobial therapy long before culture results are available; gram-negative bacteria are positive with the Giammara- Hanker PATS-TS **stain**, and gram-positive bacteria are positive with the SIGMA HT40 Gram **stain**. The gram-positive as well as gram-negative bacteria are both initially **stained** by the crystal violet **component** of the Gram **stain**. The crystal violet **stain** is readily removed from the gram-negative (but not the gram-positive) bacteria when the specimens are rinsed with alcohol/acetone. If this rinse step is omitted, the crystal violet remains attached to both gram-negative and gram-positive bacteria. It can then be rendered insoluble, electron-opaque, and conductive by treatment with silver methenamine **solution** under MW-irradiation. This metallized crystal violet is a more effective silver **stain** than the PATS-TS **stain** for a number of gram-negative spirochetes such as Treponema pallidum, the microbe that causes syphilis.

L7 ANSWER 3 OF 3 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 81228995 EMBASE
DN 1981228995
TI Fully **automated** preparation of high-quality stained blood films.
AU Adler S.L.; Groner W.; Ornstein L.
CS Technicon Instruments Corp., Tarrytown, NY 10591, United States
SO Analytical and Quantitative Cytology, (1981) 3/3 (216-224).

CODEN: AQCYDT
CY United States
DT Journal
FS 027 Biophysics, Bioengineering and Medical Instrumentation
025 Hematology
LA English
AB A detailed description is given of the operation of Technicon's AutoSlide, which automatically produces a microscope-ready, precipitate-free, **stained** blood smear with superior **cell** distribution and good morphology. A 40-test-tube turntable carrying anticoagulated blood inputs **samples** at 40-second intervals. The blood films are drawn consecutively on a continuous Mylar substrate, with nylon mesh replacing the usual **glass slide** spreaders. This flexible substrate then passes through drying, fixing, **staining** and final drying stations. The methanol of conventional Romanowsky **stains** is replaced by low-volatility solvents. The fixing **solution** contains solvents, toluidine blue O, glutaraldehyde and a trace of water. The modified Giemsa-**stain** stock, when mixed with buffer, remains precipitate free for **several** days. Finally the blood film is imprinted with a date and identification number. Liquid monomer is dispensed onto each **stained** blood film, followed by a microscope **slide**. The monomer is then polymerized using ultraviolet light. Permanent transfer of the **stained** and labeled blood film occurs when the Mylar is stripped from the **slide**. The usable area for examination is approximately five times larger than that of a typical manual wedge smear.

L10 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:784339 CAPLUS
DN 132:20777
TI Method for staining biological specimens by combining stable reagents on a microscope slide to make an unstable staining solution
IN Mehta, Parula; Graham, Marshal; Pomerantz, Anlouise
PA Ventana Medical Systems, Inc., USA
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9963342	A1	19991209	WO 1999-US12263	19990602
	W: JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1082611	A1	20010314	EP 1999-955323	19990602
	R: DE, FR, GB				
	JP 2002517725	T2	20020618	JP 2000-552498	19990602
PRAI	US 1998-87673P	P	19980602		
	WO 1999-US12263	W	19990602		

AB The present invention relates to automated methods for **staining** biolocal materials on a slide comprising the use of component histochem. solns. mixed directly on a biol. sample of interest. The method comprises providing at least **two** stable **solns**. that together comprise an unstable **staining soln**., sequentially delivering the stable **solns**. to a biol. sample of interst on a surface, and mixing the stable **solns**. directly on the biol. material of interest to effectuate **staining** of the material. An automated protocol was used to **stain** Aspergillus cryptococcus samples by the Grocott's method for fungi **staining**. The silver nitrate and the methanamine-borax solns. were added sep.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1970:643 CAPLUS
DN 72:643
TI Histochemical azo coupling reactions of the pigments of obstructive icterus and of hematoidin. I. Diazonium salts used
AU Lillie, Ralph D.; Pizzolato, Philip
CS Sch. of Med., Louisiana State Univ., New Orleans, LA, USA
SO Journal of Histochemistry and Cytochemistry (1969), 17(11), 738-48
CODEN: JHCYAS; ISSN: 0022-1554
DT Journal
LA English
AB The azo coupling reaction readily demonstrates bile pigment and hematoidin in routine paraffin sections of human postmortem and surgical material fixed in formol, alc., CHCl3 + MeOH, etc. A no. of freshly diazotized amines as well as several com. stable diazonium salts have been used successfully both in acid (N HOAc) and slightly alk. (pH 7.5-8) media. Alk. coupling yields colors with some diazotates which have been perfectly stable for 14-18 months. Acid azo coupling almost completely eliminates background **staining**, but the **staining** results appear to be somewhat less stable. However, moderately good retention of **stain** for 6 months has been observed . Safranin O yields dark red to purple bile casts and granules and hematoid in globules and crystals, methylene violet (CI 50205) gives Deep Violet and p-nitroaniline (fast red

GG) gives deep red colors of good stability. Fast Black K, Fast Black B, Fast Blue B, Fast Garnet GBC and Fast Red B have given satisfactory red colors, but stable diazotates must be reasonably fresh with preferably <1 year of shelf storage. Et anthranilate, anthranilic acid, and even aniline have yielded deep red **stains** of bile casts and hematoidin, but the azo colors are increasingly **unstable** in the order given, the last fading completely in 18 hr. More consistent results are obtained with Et anthranilate when a modified Claus diazotization is used. None of the diazonium salts tested discriminated between bile casts and hematoidin. The periodic acid Schiff glycol reaction colors bile casts red but fails to color hematoidin globules. It is thought that this reaction demonstrates the presence or absence of glucuronic acid, although of course it is not specific for that substance. For the study of hematoidin, **several** of the red azo coupling reactions were successfully combined with a preceding Prussian blue **reaction** for hemosiderin. Combination of the argentaffin reaction with the Prussian blue reaction does not prove practicable in either sequence. Sulfation enhances the basophilia of bile casts, but to a lesser degree than alk. azo coupling with sulfanilic acid.

L10 ANSWER 3 OF 3 EMBASE
on STN
AN 1998353393 EMBASE
TI Tetramethylbenzidine staining procedure after starch gel electrophoresis of human haemoglobin.
AU Cucchi C.; Basaglia F.
CS Prof. C. Cucchi, Dipartimento Morfologia Embriologia, Sezione di Anatomia Comparata, Via Luigi Borsari 46, 44100 Ferrara, Italy
SO Comparative Haematology International, (1998) 8/3 (178-181).
Refs: 18
ISSN: 0938-7714 CODEN: CHAIEX
CY United Kingdom
DT Journal; Article
FS 001 Anatomy, Anthropology, Embryology and Histology
025 Hematology
LA English
SL English
AB The purpose of the present work was to increase the stability of tetramethylbenzidine-**stained** electrophoretic patterns of human haemoglobin through use of a suitable fixing agent. Since haemoglobin examination is quite important in the study of numerous pathologies, in prenatal analyses and in forensic medicine, it was considered worthwhile to attempt to stabilise the specific tetramethylbenzidine-based **stain**, which is notoriously **unstable**. The other **stain** frequently used is amido black 10 B, a generic protein **stain**, which reveals both haemoglobin and non-haemoglobin bands, hence interpretation of the results can lead to errors and the identification of false pattern heterogeneity. Following **several** experimental tests we have observed that it is possible to make tetramethylbenzidine-based **stains** stable by using a suitable fixative. Treatment with the fixing **solution** prevents the colour from fading, and can keep it intact for over a year. The method also appears promising for studying haemoglobin in a variety of other species of vertebrates.